

## Appendix A References

### A-1. Required Publications

**TM 5-809-1**

Structural Design Criteria for Loads

**ER 5-7-1 (FR)**

Project Management

**ER 200-2-2**

Procedures for Implementing NEPA

**ER 1105-2-100**

Guidance for Conducting Civil Works Planning Studies

**ER 1110-2-100**

Periodic Inspection and Continuing Evaluation of Completed Civil Works Structures

**ER 1110-2-1150**

Engineering and Design for Civil Works Projects

**ER 1110-2-1200**

Plans and Specifications for Civil Works Projects

**ER 1110-2-1404**

Hydraulic Design of Deep Draft Navigation Projects

**ER 1110-2-1457**

Hydraulic Design of Small Boat Navigation

**ER 1110-2-1458**

Hydraulic Design of Shallow Draft Navigation Projects

**ER 1110-2-1806**

Earthquake Design and Analysis for Corps of Engineers Projects

**ER 1110-2-8152**

Planning and Design of Temporary Cofferdams and Braced Excavations

**ER 1130-2-306**

Navigation Lights, Aids to Navigation, Charts, and Related Data Policy, Practices and Procedures

**EP 310-1-6A and 6B**

Sign Standards Manual

**EP 1165-2-1**

Digest of Water Resources Policies

**EM 385-1-1**

Safety and Health Requirements Manual

**EM 1110-1-1802**

Geophysical Exploration

**EM 1110-1-1804**

Geotechnical Investigations

**EM 1110-1-1904**

Settlement Analysis

**EM 1110-1-1905**

Bearing Capacity of Soils

**EM 1110-2-38**

Environmental Quality in Design of Civil Works Projects

**EM 1110-2-301**

Guidelines for Landscape Planting at Floodwalls, Levees, and Embankment Dams

**EM 1110-2-1202**

Environmental Engineering for Deep-Draft Navigation Projects

**EM 1110-2-1204**

Environmental Engineering for Coastal Shore Protection

**EM 1110-2-1205**

Environmental Engineering for Local Flood Control Channels

**EM 1110-2-1601**

Hydraulic Design of Flood Control Channels

**EM 1110-2-1604**

Hydraulic Design of Navigation Locks

**EM 1110-2-1605**

Hydraulic Design of Navigation Dams

**EM 1110-2-1610**

Hydraulic Design of Lock Culvert Valves

**EM 1110-2-1612**

Ice Engineering

**EM 1110-2-2602**  
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**EM 1110-2-2104**

Strength Design for Reinforced-Concrete Hydraulic Structures

**EM 1110-2-2200**

Gravity Dam Design

**EM 1110-2-2502**

Retaining and Flood Walls

**EM 1110-2-2503**

Design of Sheet Pile Cellular Structures Cofferdams and Retaining Structures

**EM 1110-2-2608**

Navigation Locks - Fire Protection Provisions

**EM 1110-2-2703**

Lock Gates and Operating Equipment

**EM 1110-2-2906**

Design of Pile Foundations

**EM 1110-2-4300**

Instrumentation for Concrete Structures

**ETL 1110-2-256**

Sliding Stability for Concrete Structures

**ETL 1110-2-310**

Stability Criteria for Existing Concrete Navigation Structures on Rock Foundations

**ETL 1110-2-321**

Reliability Assessment of Navigation Structures, Stability of Existing Gravity Structures

**ETL 1110-2-338**

Barge Impact Analysis

**ETL 1110-2-355**

Structural Analysis and Design of U-Frame Lock Monoliths

**ETL 1110-2-365**

Nonlinear Incremental Structural Analysis of Massive Concrete Structures

**ETL 1110-2-532**

Reliability Assessment of Navigation Structures

**ETL 1110-8-13 (FR)**

Structural Engineering Responsibilities for Civil Works Projects

**Computer Programs**

Available from U.S. Army Engineer Waterways Experiment Station, Engineering Computer Programs Library, 3909 Halls Ferry Road, Vicksburg, MS 39180-6199.

**CFRAME**

Interactive Graphic Plane Frame Analysis

**CSLIDE**

Sliding Stability Analysis of Concrete Structures

**CWFRAM**

Analysis of Two-Dimensional U-Frame Structure

**CBEAR**

Bearing Capacity Analysis of Shallow Foundations

**CPGA**

Pile Group Analysis Program - Rigid Base Method

**DSAD**

Interactive Graphic Three-dimensional Stability Analysis/Design Program

**SOILSTRUCT**

Soil-Structure Interaction Program

**A-2. Related Publications**

Note: Related publications used in this EM are available on interlibrary loan from the Research Library, ATTN: CEWES-IM-MI-R, U.S. Army Engineer Waterways Experiment Station, 3909 Halls Ferry Road, Vicksburg, MS 39180-6199.

**American Association of State Highway and Transportation Officials (AASHTO)**

American Association of State Highway and Transportation Officials (AASHTO). "Standard Specifications for Highway Bridges."

**American Concrete Institute (ACI) 1981**

American Concrete Institute (ACI). 1981. "Control of Cracking in Concrete Structures," ACI 224 R-80.

**American Society for Testing Materials (ASTM) 1990**  
American Society for Testing Materials (ASTM). 1990. "Standard Test Method for Classification of Soils for Engineering Purposes," *Book of ASTM Standards*.

**Bloor 1951**

Bloor, R. L. 1951. "Lock Sizes for Inland Waterways," *Transactions of the American Society of Civil Engineers*, Vol 116.

**Clough and Duncan 1969**

Clough, G. W., and Duncan, J. M. 1969. "Finite Element Analysis of Port Allen and Old River Locks," Contract Report S-69-6, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

**Coastal Engineering Research Center 1984**

Coastal Engineering Research Center. 1984. *Shore Protection Manual (SPM)*, Vol 11.

**Davis 1989**

Davis, J. P. 1989. "Hydraulic Design of Navigation Locks," Miscellaneous Paper HL-89-5, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

**Duncan, Clough, and Ebeling 1990**

Duncan, J. M., Clough, G. W., and Ebeling, R. M. 1990. "Behavior and Design of Gravity Earth Retaining Structures," American Society of Civil Engineers conference on the *Design and Performance of Earth Retaining Structures*, Cornell, NY.

**Ebeling 1990**

Ebeling, R. M. 1990. "Review of Finite Element Procedures for Earth Retaining Structures," Miscellaneous Paper ITL-90-5, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

**Ebeling et al. 1992 (Mar)**

Ebeling, R. M., Clough, G. W., Duncan, J. M., and Brandon, T. L. 1992 (Mar). "Methods of Evaluating the Stability and Safety of Gravity Earth Retaining Structures Founded on Rock," Technical Report REMR CS-29, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

**Ebeling, Duncan, and Clough 1990 (Oct)**

Ebeling, R. M., Duncan, J. M., and Clough, G. W. 1990 (Oct). "Method of Evaluating the Stability and Safety of Gravity Earth Retaining Structures Founded on Rock - Phase 2 Study" Technical Report ITL-90-7, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

**Ebeling et al. 1992 (Oct)**

Ebeling, R. M., Mosher, R. M., Abraham, K., and Peters, J. F. 1992 (Oct). "Soil Structure Interaction Study of Red River Lock and Dam No. 1 Subjected to Sediment Loading," Technical Report ITI-93-2, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

**Ebeling, Peters, and Clough 1992 (May)**

Ebeling, R. M., Peters, J. F., and Clough, G. W. 1992 (May). "Users Guide for the Incremental Construction, Soil-Structure Interaction Program SOILSTRUCT, Technical Report ITL-90-6, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

**Filz and Duncan 1992 (Apr)**

Filz, G. M., and Duncan, J. M. 1992 (Apr). "An Experimental and Analytic Study of Earth Loads on Rigid Retaining Walls," U.S. Army Engineer Waterways Experiment Station, Virginia Polytechnic Institute and State University, Blacksburg, VA.

**Hilmer 1986**

Hilmer, K. 1986. "Evaluation of a Ten-Year Measuring Program at the Eibach Lock."

**Institute for Water Resources 1988**

Institute for Water Resources. 1988. IWR 88-R-7.

**Institute for Water Resources 1992**

Institute for Water Resources. 1992. "Guidelines for Risk and Uncertainty Analysis in Water Resources Planning," IWR 92-R-1.

**A-3. Bibliography**

**American Concrete Institute (ACI) 1983**

American Concrete Institute (ACI). 1983. "Building Code Requirements for Reinforced Concrete," ACI 318-83.

**American Institute of Steel Construction (AISC) 1980**

American Institute of Steel Construction (AISC). 1980. "Manual of Steel Construction," 8th edition.

**American Welding Society (AWS) 1988**

American Welding Society (AWS). 1988. "Structural Welding Code," AWS D1-1-88.

**Ferguson 1981**

Ferguson, P. M. 1981. *Reinforced Concrete Fundamentals*, 4th edition, Wiley, New York.

**EM 1110-2-2602**  
**30 Sep 95**

**Timoshenko and Woinowsky-Krieger 1959**

Timoshenko and Woinowsky-Krieger. 1959. *Theory of Plates and Shells*, 2nd edition, McGraw-Hill, New York.